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REMARKS

The application has been reviewed in light of the final Office Action dated September 21, 2006. Claims 3-9 were pending, with claims 1 and 2 having previously been canceled, without prejudice or disclaimer. By this Amendment, claims 3 and 5 have been amended to clarify the claimed invention, and new claims 10-12 have been added. Accordingly, claims 3-12 are now pending, with claims 3 and 5 being in independent form.

Claims 3-9 were rejected under 35 U.S.C. § 102(e) as purportedly anticipated by U.S. Patent No. 6,075,920 to Kawamura et al.

This application relates to subcode data generation (such as in an optical disc player). Data is recorded in a predetermined format on an optical disc, and timing between subcode data and user data must be maintained. Applicant devised improved approaches for generating the subcode data which allows such timing to be reliably maintained. For example, in many instances, the subcode is repetitive (that is the same data is repeated for many cycles or bits). Rather than consuming memory space with such repeated bits, commands are stored in memory specifying the number of generation cycles that a particular subcode component data will be repeated. Independent claim 3 addresses these features, as well as additional features.

In another improved approach, a subcode-data generating circuit is provided which includes a source of subcode P data, a toggle generating portion independently generating toggling data, and a selecting portion which selects one of the subcode P data from the source and the toggling data from the toggle generating portion, wherein in each instance of the toggling data, a time duration between a first change of state from the high state to the low state and a next change of state from the low state to the high state is a predetermined regular interval. Such a subcode-data generating circuit can

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satisfy the timing requirement for subcode P data when music data (and the like) are involved.

Independent claim 5 addresses these features, as well as additional features.

Kawamura does not teach or suggest claim 3 or claim 5 of the present application.

Kawamura, column 9, lines 24-26, states the following regarding the circuitry proposed by Kawamura for generating subcodes: "A time code information generator 9 generates time code information in response to a command from the control unit 20."

In addition, Kawamura, column 10, lines 18-32, states the following:

The control unit 20 supplies a supply command to the master data supply unit 2 and the computer 3 in accordance with editing instructions from the user, indicates the processing unit of read/write, i.e., the size of a sector for the data recording medium 19 to the multiplexer circuit 8, and supplies a time code generating command to the time code information generator 9. The control unit 20 also supplies a switching command to the time code switching circuit 10, receives a command related to copyright management, layer information, track number, application identification number, and application information from an input unit, not shown, and supplies the subcode encoder 11 with sector number information, copyright management information, layer information, track number, application identification number, and application information.

Thus, the control unit 20 in the circuitry proposed by Kawamura issues assorted commands as circumstances require.

Applicant does not find disclosure or suggestion in the cited art, however, of a subcode-data generating circuit comprising a first generating portion for automatically generating the subcode component data which indicates the time information, wherein the first generating portion operates according to a first command for automatic generation of a plurality of time information subcode component data, wherein the first commands are written collectively in a first area of memory, and wherein each of the first commands written in memory includes specification of a corresponding number of generation cycles, as provided by the subject matter of claim 3 as amended.

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Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claim 3 and the claims depending therefrom are patentable over the cited art.

It is contended in the Office Action that various circuits in the circuitry proposed by Kawamura constitute toggle generating portions since the subcode changes from a field of bits to a different field of bits.

However, this contention in the Office Action entirely misses the point. Claim 5 provides a subcode-data generating circuit, comprising a toggle generating portion which independently generates toggling data, the state of said toggling data alternating between a high state and a low state at a predetermined period. The changes from a field of bits to a different field of bits in a subcode to which the Office Action refers does not occur at a predetermined period.

Further, the circuitry proposed by Kawamura also fails to disclose or suggest that in each instance of the toggling data, a time duration between a first change of state from the high state to the low state and a next change of state from the low state to the high state is a predetermined regular interval, as provided by the subject matter of claim 5 as amended.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claim 5 and the claims depending therefrom are patentable over the cited art.

In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our

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Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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